Airfree destroys rather than holds viruses

**The power** of the 180-200°C heat in the Airfree ceramic core mini ducts to destroy viruses

Airfree is a complementary precaution to keep a low level of microorganisms in indoor environments. WHO’s standard recommendations for individual protection, reducing exposure and cross transmission are to be followed.

**Why Airfree?**

It has long been known and scientifically proven that all microorganisms, viruses in particular, are sensitive to heat. It is common knowledge that boiling water or boiling an egg at 100°C destroys viruses and bacteria.

**Examples of virus inactivation by heat**

Numerous studies confirm the inactivation of viruses with the application of heat. For example, the HIV virus in the blood will die when exposed to 77°C for just 0.006 seconds³. In another study², the “parvovirus” and “phage phiX174” viruses were completely inactivated when exposed to 103°C. The SARS and MERS viruses (coronaviruses that cause Severe Acute Respiratory Syndrome or Middle East Respiratory Syndrome) have temperature sensitive proteins in their envelopes, which can be totally denatured at temperatures above 65°C, and remain inactive³⁴⁵⁶. Similarly, proteins essential for the transmission of the influenza virus are sensitive to temperatures between 55°C and 70°C⁷. Since 1977, studies show that the higher the temperature, the faster the proteins denature⁷. Viruses heat sensitivity is dependent on several factors, such as virus type, exposure time, temperature and methodology. Recent studies have shown that exposure to continuous air flow heating for sub-second time interval is highly efficient on inactivating MS2 virus, considered relatively stable at environmental stress conditions⁸.
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1. Contaminated air enters Airfree here

2. Airfree sterilises the air at 180-200°C destroying viruses and microorganisms inside the 32 mini ducts of the TSS patented ceramic core

3. Purified air is released to the room

Air is sterilised when passing through the ceramic core mini ducts. A silent and maintenance-free operation
Airfree TSS technology

The Airfree TSS technology employs high temperatures inside its ceramic core mini ducts to destroy any airborne microorganism passing through them. Independent tests by international laboratories confirm Airfree’s efficiency in destroying viruses, bacteria, mould, as well as allergens at a temperature of 180-200ºC. Tests available at www.airfree.com.

Airfree cannot warrant that all viruses will be immediately destroyed in a room therefore, remains the possibility of some being inhaled.

Airfree additional advantages

- Patented and environmentally friendly technology
- Maintenance-free
- Totally silent
- Low energy consumption
- Small and portable
- Night Light*
- Award-winning design
- 2-year warranty
- Ozone-free

*Check the available models.
Sources:
6 - Epand RM, Epand RF. The Thermal Denaturation of Influenza Virus and its Relationship to Membrane Fusion. Biochemical Journal Immediate Publication. Published on 7 May 2002 as manuscript BJ20020290.

www.airfree.com